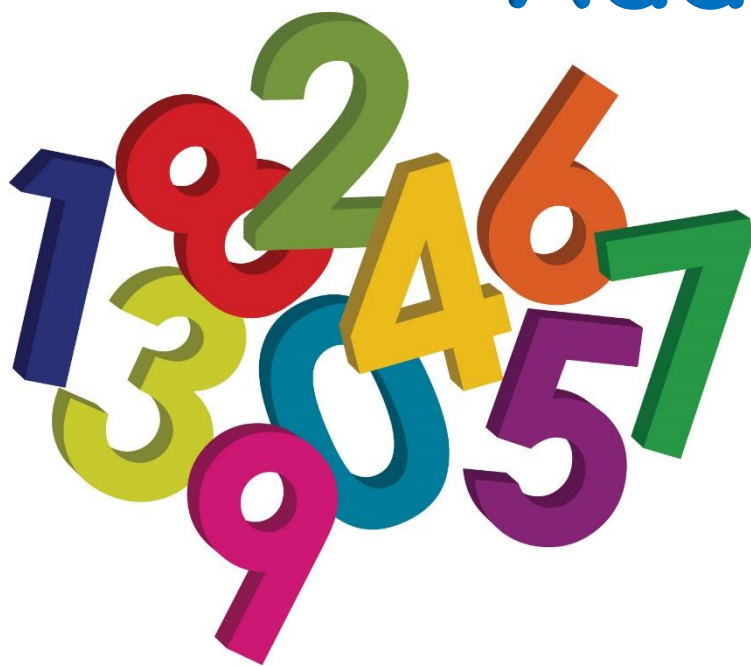




# Maths

# Booklet

## Addition



# Poplars

The aim of this booklet is to outline what is expected by the end of the year. We have included some of the strategies that will be used in class so that support is given in the same way.

We have included some games and activities that can be done at home to help them develop fluency and understanding.

### Addition Expected targets.

- Recall number bonds within 100.
- add numbers mentally, including:
  - 2 two-digit numbers
  - a three-digit number and 1s
  - a three-digit number and 10s
  - a three-digit number and 100s
- add numbers with up to 3 digits, using written and mental methods
- solve problems, including missing number problems, using number facts and place value.

#### Number bonds of multiples of 10

$$\begin{array}{ll} 10 + ? = 20 & 25 + 5 = ? \\ 17 + 3 = ? & ? + 42 = 50 \\ ? + 14 = 20 & 90 + 10 = ? \end{array}$$

#### Strategies to add 2 two-digit numbers.

$$\begin{array}{l} 26+33 \text{ (} 20+30= 50, 6+3 = 9 \\ 50+9 = 59) \\ 64+76 = \text{(Spot number bonds. } 60+70 = 130, \\ 46 = 10. \quad 130+10 = 140.) \\ 49+85 = (50+ 80+5 = 135. \quad 135-1=134 \end{array}$$

#### Using place value to add to 2 digit and 3 digit numbers.

$$\begin{array}{l} 45+ 200= (200, 40, 5 \\ 2 \text{ hundreds, 4 tens and 5 ones)} \\ 591+400= (5 \text{ hundreds and} \\ 4 \text{ hundreds, 9 tens and 1 one} = \\ 9 \text{ hundreds, 4 tens and 5 ones,)} \end{array}$$

#### Use what they know to work out other facts.

I know that 5+7 is 12 so 50+70 (5 tens + 7 tens is 12 tens = 120)

I know that 8 and 2 is 10 so I know 800+200=1000.

#### Vertical addition expanded.

$$256 + 177 =$$

256
+177
13 ones
120 tens
300 hundreds
<b>433</b>

## Games and activities you could play with your child.

### Go Fish

Teaching Addition Math Facts to Kids with Go Fish! This new twist on the old classic Go Fish! helps kids to learn addition by mentally working out simple math problems. Each round played practices math facts for a specific number, making it easy to stick with one set of facts for as long as needed to solidify them in the players' mind.

All that's needed to play this game is a standard deck of playing cards. It is best enjoyed with 2-4 players.

### How to Play Go Fish!

1. Sort through the deck to remove all cards that are higher than that featured number for the math game. For example, if the goal is to learn addition facts for the number seven, the game will be played with ones (aces) through sevens.
2. Deal out five cards to each player and place the remaining cards in a draw pile.
3. Have each player look through their hand of cards to find any pairs that add up to the featured number and place them face up in their discard pile. For example, if learning addition facts for the number seven, appropriate pairs would be  $6+1$ ,  $5+2$  or  $4+3$ . The 7 card would also be laid aside as a correct solution that doesn't require a pair.
4. The person to the left of the dealer may now ask any other player for a card that will help create the sum required. If the person asked has the card in his hand, they must give it up to the player that made the request. A player can keep asking for cards until no further matches are able to be made, at which point they are told to Go Fish! from the draw pile and the next player takes a turn trying to make a match.
5. If a player runs out of cards they can choose five more cards from the draw pile to stay in the game.
6. Continue playing until all the cards in the deck have been matched into pairs. The player with the highest number of pairs at the end of the game is the winner.

## Ten-Twenty-Thirty

Try this single-player addition game! All you need is a deck of playing cards to get started. Try to find sums of 10, 20, or 30 in order to clear cards. Practice your adding, and double check your work. If you can clear all of the cards, you'll win! "Ten-Twenty-Thirty" is a great way to have fun while practicing simple addition facts. After you've mastered the directions, check out the variations for new ways to play.

Skill:

- Addition

What You Need:

- One deck of playing cards (Print a deck.)

What You Do:

1. Shuffle the deck. Create a row of seven cards, face up. Place two cards on top of each of the seven so you have seven piles of 3 cards each. Arrange the cards so you can see the face value of every card.
2. Place the rest of the deck to the side, to be used later.
3. The object of the game is to remove a pile when the sum of all of its cards is 10, 20, or 30. All face cards equal 10. For example, if a pile has an ace, 9, and jack in it, it could be removed because its sum is 20 ( $1 + 9 + 10$ ). Go ahead and remove all of the piles that equal 10 to start.
4. Deal a fourth card on top of every pile that remains. Remove any stacks that now equal a multiple of 10.
5. Deal a fifth card on top of every pile that remains. Remove any stacks possible.
6. Continue adding cards and removing stacks until your deck is depleted or the stacks have all been removed.
7. If you remove all the stacks first, you have won! If your deck is emptied first, try again.

Variations:

- Remove two sets of cards at once if their combined sum is a multiple of 10.
- Look for different sums, let's say 9, 19, and 29. Or multiples of 6.

## Ring Your Neck

Add up your cards in this strategy game. Deal 13 playing cards into a circle, face down. Take turns selecting one or two cards at a time and adding their values to your total. Carefully plan your moves. The player who picks up the last card will add 50 points to his score! Use a calculator for help, if you'd like the game to focus on strategy, or use scratch paper if you'd like some extra practice with addition.

What You Need:

- One deck of cards (ace = 1, jack = 11, queen = 12, king = 13) (Print a deck.)
- One Ring Your Neck record sheet for each player (Print this out.)
- A calculator (optional)

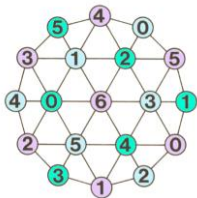
What You Do:

1. Shuffle the deck. Then place 13 cards in the centre of the playing area, face down, in a circle.
2. Players take turns picking up 1 or 2 cards at a time (their choice). Players write their score (the sum of their cards) on their record sheet.
3. The player who picks up the last card scores 50 extra points.
4. Deal another 13 cards. Play until ten rounds are over and the score sheets are complete. The player with the highest score wins.

Useful links and websites.

Totality game.

<file:///G:/2018%2019/Maths/Totality%20game%20board.pdf>



[www.ictgames.com/resources](http://www.ictgames.com/resources).

<https://www.topmarks.co.uk/maths-games/hit-the-button>

<http://www.sowealleyprimary.co.uk/documents/DiceGames-plus.pdf>

[www.prodigygame.com](http://www.prodigygame.com)

This booklet has some fun games to play. Look at the KS2 games.



Ask Mrs Moss for the class code.